3. (Once Amended) The apparatus of claim 1, wherein said circuitry further comprises:

a first adder configured to add said first value and said second value, said first adder generates a carry-out value and at least one of a P value, a K value and G value of a PKG recoded number.

5. (Once Amended) The apparatus of claim 3, wherein said first value is at least one of a P value, a K value and a G value of a PKG recoded number.

6. ~~(Once Amended)~~ The apparatus of claim 1, further comprising:

a recoder configured to convert at least one ~~dual-rail~~ encoded value into said second value.

7. (Once Amended) A method for performing the addition of PKG recoded numbers, comprising the steps of:

receiving a first value;

receiving a second value, wherein said second value is at least one of a P value, a K value and a G value of a PKG recoded number; and

generating a sum value and a carry value from said first value and said second value.

8. (Once Amended) The method of claim 7, further comprising the steps of:

adding said first value and said second value;

generating a first result including at least one of a P value, a K value and a G value from said adding; and

generating a first carry-out value from said adding.

9. (Once Amended) The method of claim 8, further comprising the steps of:

adding said first result and a carry-in value;

generating a final sum value from said adding; and

generating a final carry-out value from said adding.

11. ~~(Once Amended) The method~~ of claim 8, wherein said first value is at least one of a P value, a K value and a G value of a PKG recoded number.

12. (Once Amended) The method of claim 7, further comprising the step of:

converting at least one dual rail encoded value into said second value.

13. (Once Amended) An apparatus for apparatus performing the addition of PKG recoded number, said apparatus comprising:

means for receiving a first value;

means for receiving a second value, said second value including at least one of a P value, a K value and G value of a PKG recoded number ; and

means for generating a sum value and a carry value from said first value and said second value.

14. (Once Amended) The apparatus of claim 13, further comprising:

means for adding said first value and said second value to generate a first result and a first carry-out value.

15. (Once Amended) The apparatus of claim 14, further comprising:

means for adding said first result and a carry-in value to generate a final sum value and a final carry-out value.

17. (Once Amended) The apparatus of claim 15, wherein said first value is at least one of a P value, a K value and a G value of a PKG recoded number.

18. (Once Amended) The apparatus of claim 13, further comprising:

means for converting at least one dual rail encoded value into said second value.

19. (Once Amended) An apparatus performing the addition of PKG recoded numbers, said apparatus comprising:

a circuitry configured to receive at least one of a P value, a K value and a G value of a first PKG recoded number and at least one of a P value, a K value and a G value of a second PKG recoded number; and

wherein said circuitry generates a carry value and at least one of a P value, a K value and a G value.

20. (Once Amended) A method for performing the addition of PKG recoded numbers, comprising the steps of:

receiving at least one of a P value, a K value and a G value of a first PKG recoded number;

receiving at least one of a P value, a K value and a G value of a second PKG recoded number; and

generating a PKG sum value and a carry value from the values received.

21. (Once Amended) An apparatus for apparatus performing the addition of PKG recoded number, said apparatus comprising:

means for receiving at least one of a P value, a K value and a G value of a first PKG recoded number;

means for receiving at least one of a P value, a K value and a G value of a second PKG recoded number; and

means for generating at least one of a P value, a K value and a G value of a PKG sum recoded number and a carry value from the values received.

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed September 12, 2002. Upon entry of the amendments in this response, claims 1 – 21 remain pending. Reconsideration and allowance of the application and presently pending claims are respectfully requested.